

BY



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,501	07/06/2001	Jang-hoon Yoo	1293.1210	9910

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 WASHINGTON, DC 20005

EXAMINER

HINDI, NABIL Z

ART UNIT PAPER NUMBER

2655

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/899,501

Applicant(s)

YOO ET AL.

Examiner

NABIL Z. HINDI

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                                                         |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                                             | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/16/03; 10/14/03; 6/6/03; 05/23/03</u> | 6) <input type="checkbox"/> Other: _____                                                |

In response to applicant's pre-amendment dated Nov, 02, 2001. the following action is taken:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al (6898168) in view of Lee et al (6259668)

The limitation of claim 1 having the claimed FWHM is predicated on the objective lens numerical aperture in reading the type of disk. The use of claimed NA within the recited range in claim 16 is merely standard when reading a CD or DVD. The last three lines of claim 21 are merely a desired result reading on any wavelength to read a medium. The limitations of claims 1 and 16 read on an optical disk reading a CD and DVD within the standardized numerical aperture and laser wavelength. The reference shows the use of an optical head having an optical pickup with a light source 11, an objective lens 3, focusing control 6, an optical path changer 62 and photo detection means 12, 42. The objective lens having variable numerical apertures falling within the claimed range as cited in the various examples and column 24. However the reference does not disclose the use of a ring type annular area on the objective lens.

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The secondary reference Lee et al discloses the use of an objective lens 30 having an annular zone and capable of reading a DVDF and CD type disks for the purpose of reducing the optical parts and easy assembly of the optical head as cited in column 2. It would have been obvious to one skilled in the art at the time the invention was made to use the teachings of the secondary reference and modify the primary reference. Such modification of using an objective lens with a ring type is merely an integration of element in order to eliminate the use of a separate element. Thus it would have been obvious to one skilled in the art to use the teachings of the secondary reference for the purpose of reducing the elements parts in the system thus easily manufactured.

With respect to the limitations of claims 2, 17, 22 and 37. The reference is drawn to reading a DVD and CD.

With respect to the limitations of claims 3, 5, 18 and 19. The use of the claimed wavelengths are standard in reading the CD and DVD disks as cited in column 24.

With respect to the limitations of claims 4, 6, 7, 26 and 31. The reference discloses the use of a numerical aperture falling the claimed limitation.

With respect to the limitations of claims 8-11, 20 and 27-30. The secondary reference discloses the use of a ring type on the objective lens in order to read a DVD and CD type disks.

With respect to the limitations of claims 12-15 and 32-see elements 1, 71, 72 and 61.

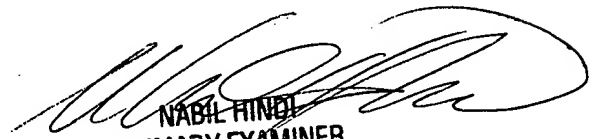
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With respect to the limitations of claims 23-25. The use of a module having a laser and holographic element is notoriously well established in the art as cited in some of the IDS's by applicant.

With respect to the limitation of claim 33 see element 17 of the primary reference.

With respect to the limitations of claims 34 and 35. such limitations (range) are standard within the DVD and CD reading apparatus/system.

Any inquiry concerning this communication should be directed to NABIL Z. HINDI at telephone number (571) 272-7618.

  
NABIL HINDI  
PRIMARY EXAMINER  
GROUP 2  
24.5